Université Grenoble Alpes Département

R3.02 – Développement efficace

TP 3 (associé au Cours 3)
DTD Mondial

```
<!ELEMENT mondial (countriescategory, continentscategory, organizationscategory, seascategory,</p>
riverscategory,
                 lakescategory,
                                 islandscategory,
                                                    mountainscategory,
                                                                          desertscategory,
airportscategory)>
<!ELEMENT countriescategory (country*)>
<!ELEMENT continentscategory (continent*)>
<!ELEMENT organizationscategory (organization*)>
<!ELEMENT seascategory (sea*)>
<!ELEMENT riverscategory (river*)>
<!ELEMENT lakescategory (lake*)>
<!ELEMENT islandscategory (island*)>
<!ELEMENT mountainscategory (mountain*)>
<!ELEMENT desertscategory (desert*)>
<!ELEMENT airportscategory (airport*)>
<!ELEMENT country (name+, localname?, population+, population_growth?, infant_mortality?,</pre>
adp_total?, adp_agri?, adp_ind?, adp_serv?, inflation?, unemployment?, (indep_date|dependent)?,
government?, encompassed*, ethnicgroup*, religion*, language*, border*, (province+|city+))>
 <!ATTLIST country car_code ID #IMPLIED
         area CDATA #IMPLIED
         capital IDREF #IMPLIED
         memberships IDREFS #IMPLIED>
<!ELEMENT name (#PCDATA)>
<!ELEMENT localname (#PCDATA)>
<!ELEMENT area (#PCDATA)>
<!ELEMENT population (#PCDATA)>
<!-- note that population is also a subelement of city -->
<!ATTLIST population year CDATA #IMPLIED</p>
            measured CDATA #IMPLIED>
<!ELEMENT population_growth (#PCDATA)>
<!ELEMENT infant_mortality (#PCDATA)>
<!ELEMENT gdp_total (#PCDATA)>
<!ELEMENT adp_ind (#PCDATA)>
<!ELEMENT gdp_agri (#PCDATA)>
<!ELEMENT qdp_serv (#PCDATA)>
<!ELEMENT inflation (#PCDATA)>
<!ELEMENT unemployment (#PCDATA)>
<!ELEMENT indep_date (#PCDATA)>
 <!ATTLIST indep_date from CDATA #IMPLIED>
 <!-- usually idref to a country, but not always (e.g. "Ottoman Empire") -->
<!ELEMENT dependent EMPTY>
 <!ATTLIST dependent country IDREF #REQUIRED>
<!ELEMENT government (#PCDATA)>
```

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<!ELEMENT encompassed EMPTY>
 <!ATTLIST encompassed continent IDREF #REQUIRED
           percentage CDATA #REOUIRED>
<!ELEMENT ethnicgroup (#PCDATA)>
 <!ATTLIST ethnicgroup percentage CDATA #REQUIRED>
<!ELEMENT religion (#PCDATA)>
 <!ATTLIST religion percentage CDATA #REQUIRED>
<!ELEMENT language (#PCDATA)>
 <!ATTLIST language percentage CDATA #REQUIRED>
<!ELEMENT border EMPTY>
 <!ATTLIST border country IDREF #REQUIRED
         length CDATA #REQUIRED>
<!ELEMENT province (name+, localname?, area?, population*, city*)>
<!-- division administrative principale, ex.: état, région, ... -->
<!-- attention, les villes ne sont définies que dans une province -->
 <!ATTLIST province id ID #REQUIRED
         country IDREF #REQUIRED
         capital IDREF #IMPLIED>
<!ELEMENT city (name+, localname?, latitude?, longitude?, elevation?, population*, located_at*,
located_on*)>
 <!ATTLIST city id ID #REQUIRED
       is_country_cap CDATA #IMPLIED
       is_state_cap CDATA #IMPLIED
       country IDREF #REQUIRED
       province IDREF #IMPLIED>
<!ELEMENT longitude (#PCDATA)>
<!ELEMENT latitude (#PCDATA)>
<!ELEMENT elevation (#PCDATA)>
<!ELEMENT height (#PCDATA)> <!-- height of a dam -->
<!ELEMENT located_at EMPTY>
 <!ATTLIST located_at watertype (river|sea|lake) #REQUIRED
           river IDREFS #IMPLIED
          sea IDREFS #IMPLIED
           lake IDREFS #IMPLIED>
<!ELEMENT located_on EMPTY>
 <!ATTLIST located_on island IDREF #REQUIRED>
```

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<!ELEMENT organization (name, abbrev, established?, members*)>
<!ATTLIST organization id ID #REOUIRED
            headq IDREF #IMPLIED>
<!ELEMENT abbrev (#PCDATA)>
<!ELEMENT established (#PCDATA)>
<!ELEMENT members EMPTY>
<!ATTLIST members type CDATA #REQUIRED
         country IDREFS #REQUIRED>
<!ELEMENT continent (name, area)>
<!ATTLIST continent id ID #REOUIRED>
<!ELEMENT lake (name+, located*, to?, area?, latitude?, longitude?, elevation?, depth?, height?)>
<!ATTLIST lake id ID #REQUIRED
       country IDREFS #REQUIRED
       island IDREF #IMPLIED
       salinity CDATA #IMPLIED
       type (saline|acid|artificial|dam|caldera|crater|impact|naturaldam|asphalt) #IMPLIED>
<!ELEMENT sea (name+, located*, area?, depth?)>
<!ATTLIST sea id ID #REQUIRED
       country IDREFS #REQUIRED
       bordering IDREFS #IMPLIED>
<!ELEMENT river (name+, located*, through*, to?, area?, length?, source?, estuary?)>
<!ATTLIST river id ID #REOUIRED
        country IDREFS #REQUIRED
        island IDREF #IMPLIED>
<!ELEMENT length (#PCDATA)>
<!ELEMENT depth (#PCDATA)>
<!ELEMENT to EMPTY>
<!ATTLIST to watertype (river|sea|lake) #REQUIRED
      water IDREF #REOUIRED>
<!ELEMENT through EMPTY>
<!ATTLIST through lake IDREFS #REQUIRED>
<!ELEMENT source (mountains?, located*, from?, latitude?, longitude?, elevation?)>
<!ATTLIST source country IDREFS #REQUIRED>
<!ELEMENT from EMPTY>
<!ATTLIST from watertype (river|sea|lake) #REQUIRED
      water IDREFS #REQUIRED>
<!-- a river may flow from a lake or one or more rivers -->
<!ELEMENT estuary (located*, latitude?, longitude?, elevation?)>
<!ATTLIST estuary country IDREFS #REQUIRED>
<!ELEMENT located EMPTY>
<!ATTLIST located country IDREF #REQUIRED
         province IDREFS #IMPLIED>
```

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<!ELEMENT desert (name+, located*, area?, latitude?, longitude?)>
 <!ATTLIST desert id ID #REQUIRED
         country IDREFS #REQUIRED
        type (sand|rocks|lime|salt|ice) #IMPLIED>
<!ELEMENT island (name+, islands?, located*, area?, latitude?, longitude?, elevation?)>
 <!ATTLIST island id ID #REQUIRED
         sea IDREFS #IMPLIED
         lake IDREF #IMPLIED
         river IDREFS #IMPLIED
         country IDREFS #REQUIRED
         type (volcanic|coral|atol||lime) #IMPLIED>
<!ELEMENT islands (#PCDATA)>
<!ELEMENT mountain (name+, mountains?, located*, latitude?, longitude?, elevation?)>
 <!ATTLIST mountain id ID #REQUIRED
          country IDREFS #REQUIRED
          island IDREF #IMPLIED
          type (volcanic|volcano|monolith|granite) #IMPLIED
          last_eruption CDATA #IMPLIED>
<!ELEMENT mountains (#PCDATA)>
<!ELEMENT airport (name+, latitude, longitude, elevation?, gmtOffset, located_on?)>
 <!ATTLIST airport iatacode NMTOKEN #REQUIRED
          city IDREF #IMPLIED
          country IDREF #REQUIRED>
<!ELEMENT gmtOffset (#PCDATA)>
```

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